

1	<u>aesthetical</u>				
	The objective of this document is to document the requirement for the low cost electroencephalogram (EEG) developed by the Discount Megamind group.				
2	<u>Scope:</u>				
	The scope of this document is to define the requirement established by the client including but not limited to: ability, cost, and deliverables.				
3	<u>References:</u>				
	This is place to cite any standards, regulations, etc. relevant to the requirements...	https://mayfieldclinic.com/pe-eeg.htm			
4	<u>Functional Requirements:</u>				
	User Interface Requirements:				
		User shall be gentle with equipment and follow given instructions for proper operation			
	What the product should do:				
		Distinguish brainwaves from environmental noise			
5	<u>Mechanical Requirements:</u>				
	Strength Requirements:				
		Axial tension load	50	lbs	
		Cross Sectional shear load	50	lbs	
		Sensor to Head interface pressure	2	lbs	
		Vertical crush load	50	lbs	
	Spatial Requirements:				
		The headset shall allow for the following:			
		Overall Diameter	15-20	in	
		Overall Width	1	in	
		Overall Thickness	0.5	in	
		Movable sensor position in X/Y/Z	1	in	
		Rotatable sensor postion about Z axis	+/- 30	deg	
	Weight/Mass Requirements:				
		Maximum weight	1.5	lbs	
	Mounting / Interface Requirements:				
		Placement of Electrodes on correct interface points	+/- 0.1	in	
		Amount of electrodes	6	electrodes	
		Amount of contact between electrode and skin	90	%	
	Appearance Requirements:				
		Surface finish	Painted black		
		Sleek, futuristic, and wearable in a high school environment	Designer's Discretion		
	Durability Requirements:				
		All movable components high fatigue life	500,000	cycles	
		Amount of replaceable components	90	%	
	Reliability Requirements:				
		Reliabilty of resistors? processors?	90	%	